

What is claimed is:

1. A device (1) for measuring at least one parameter, in particular of a mass flow, of a medium flowing in a main direction of flow (18) in a line (14), in particular of an intake air mass flow of an internal combustion engine, comprising the following features:

a) a measuring element (25), which is circumflowed by the medium, is positioned in the line (14);

b) at least one constriction (35) that produces acoustic disturbances is present in the line (14);

wherein the constriction (35) is designed as a mechanical-acoustic prevention element (40).

2. The device according to Claim 1, wherein at least one element (84) for reducing the impact of fluid or solid particles on the measuring element (25) is positioned in the line (14).

3. The device according to Claim 2, wherein a tubular body (85) having a flow channel (87), through which the medium flows, is provided in the line (14) as the element (84) for reducing the impact of fluid or solid particles on the measuring element (25); and the measuring element (25) is located in the tubular body (85).

4. The device according to Claim 2 or 3, wherein a protective screen (90) is located in the line (14) or in the tubular body (85) as the element (84) for reducing

the impact of fluid or solid particles on the measuring element (25).

5. The device according to one or more of the preceding claims, wherein the at least one prevention element (40) is designed as a radial elevation (79) along a radial circumferential line (80) of the line (14).

6. The device according to Claim 5, wherein the at least one radial elevation (79) has a rectangular cross-section at right angles to the main direction of flow (18).

7. The device according to Claim 5 or 6 wherein the at least one radial elevation (79) has a trapezoidal cross-section at right angles to the main direction of flow (18).

8. The device according to one or more of Claims 5 through 7, wherein the at least one radial elevation (79) has an oval or circular cross-section at right angles to the main direction of flow (18).

9. The device according to one or more of Claims 5 through 8, wherein the radial elevations (79) are evenly spaced in relation to one another along a radial circumferential line (80) of the line (14).

10. The device according to one or more of Claims 5 through 9, wherein the radial elevations (79) have the same shape.

11. The device according to one or more of preceding claims 1 through 3, wherein the line (14) has a center line (21); and an aperture (82) that has a radial limiting line (81) is provided in the line (14) as the acoustic prevention element (40), with the radial distance between the radial limiting line and the center line (21) varying in the radial circumferential direction.

12. The device according to Claim 11, wherein the radial limiting line (81) of the aperture (82) is designed in the shape of a wave.

13. The device according to one or more of the preceding claims, wherein the at least one prevention element (40) is rounded against the main direction of flow (18).

14. The device according to one or more of the preceding claims, wherein a flow straightener (30), which is integrated into a rigid conduit (33) that can be inserted into the line (14), is provided in the line (14); and the at least one prevention element (40) is provided as a single unit on the rigid conduit (33) of the flow straightener (30).

15. The device according to one or more of the preceding claims, wherein the at least one prevention element (40) is provided as a single unit on a second rigid conduit (72) that can be inserted into the line (14).

